

FDC-FIRE DISTRIBUTION CENTER

-Ensuring mission success

The Fire Distribution Center (FDC) is a proven and fielded Air Defense BMC4I module providing scalable, mobile, modern BMC4I for current and future air defense missions. The FDC builds on flexibility, scalability, interoperability, and an open SW/HW architecture to enable fully netted and distributed operations and ease insertion of new technology and capabilities.

The FDC will meet the requirements and ensure BMC4I functionality for any true mixed and layered Air Defense system configuration in national and multi-national scenarios. More than 100 FDCs are delivered as the AD BMC4I module in the latest existing NASAMS, HAWK and BOC programs.

A high degree of commonality, use of commercial-of-the-shelf (COTS) and Non-Developmental Items represent a low risk, cost effective approach to satisfy current and evolving air defense requirements. The FDC is proven with the AMRAAM and HAWK missiles and prepared for interfacing with the IRIS-T missile, the AIM 9X Sidewinder and the Block 1 Semi-active Evolved Sea Sparrow Missile (ESSM). Other systems can be integrated via GBDL, ISDL or by a national proprietary Data Link.

Affordability is enhanced by low lifecycle costs and reduced operational and support manpower requirements, as compared to competitive systems.

FEATURES

- The world's leading C2 for Air Defense
- 12 customers in 10 different countries
- Provides flexible BMC4I at any organizational level
- Weapon and Sensor independent
- Interfaces a range of Tactical Data Links, also including all NATO standard
- Open Tactical Framework SW, enabling future growth and customer added functionality
- Fully netted and distributed AMD operations
- Scalable as well as shelter and vehicle independent
- BMC4I module for other tasks, e.g. Coastal and Land Forces



FIRE DISTRIBUTION CENTER (FDC)

The FDC is characterized by its modern fire control system with real-time data handling, interoperability and intuitive and easy to operate Man Machine Interface providing a Real-time Air Defense Battle Command and Defensive Precision Fires Capability. The open and modular SW/HW architecture enables combining Air Defense, Field Artillery, Strike Missiles and CAS Operations providing merged Offensive and Defensive Precision Fires capabilities in a true Plug & Fight tailorable solution.

The system performs data link management, sensor control, air picture production, track identification and classification, friendly protection, threat ordering, weapon allocation, weapon & engagement control and kill assessment. In addition an embedded or stand-alone Mission Support Tool (MST) is provided to accelerate the commander's decision making process regarding deployment planning, monitoring current system status, and for in-depth analysis and debriefs.

FLEXIBLE CONFIGURATION

The same baseline FDC is used in multiple programs and in various roles. Functionality, interfaces and number of workstations can be selected and tailored to customer requirements. The FDC is shelter and vehicle independent and can be delivered as a non-shelter version where the FDC interior is mounted in a building.

The following FDC configurations are available:

- **BOC – Battalion Operation Center.** A BOC can control multiple AD Battalions or other weapon systems.
- **GBADOC - Ground Based Air Defense Operation Center.** A Higher Echelon GBAD C2 unit including a Current operations cell, a Planning cell, a Communications cell and real-time engagement operations
- **BFDC (HAWK) - Battery FDC in HAWK role** to control up to two HAWK firing sections and to network up to 3 other HAWK batteries from the same FDC
- **NASAMS FDC (AMRAAM) - The FDC in Cruise Missile Defense (CMD) role** with defined tactical data links, sensor and weapon interfaces, also enabling full capability against other types of Air Breathing Targets. Other effectors than AMRAAM can easily be integrated
- **FDC-S (SHORAD/VSHORAD) - Optimized to control and coordinate SHORAD/VSHORAD resources**
- **FDC-RAID - Interfaces and controls sensors and weapons for Basecamp protection purposes.** A Battle Management System is integrated to monitor and control the Ground Situation Picture
- **FDX Precision Fires - Optimizing the use of an Army Battalion or Brigade's tactical air space to coordinate Offensive and Precision Fires.** The FDX gives the Army Battle Commander the tool he needs to coordinate all Precision Fires resources on a second-to-second basis

INTEROPERABILITY AND INTEGRATION- A KEY FDC CAPABILITY

The FDC truly integrates systems, sensors and effectors in ONE system. Higher Echelon Units, adjacent units, sensors, effectors and other battle forces are integrated through the mature and fielded Network Access Nodes utilizing fielded legacy protocols. The FDC has a wide range of fielded logical decision support tools ensuring ONE Integrated Air Picture, Common Operating Picture, Threat Evaluation and Weapon Allocation, providing a consistent Battle Command for all forces. Each system in a joint and combined theatre of operation contributes a subset of information necessary to conduct military operations. The FDC integration of tactical data links involves both the handling of relevant messages according to the standard message catalogue and the implementation of functionality in the C4I software to support the needed level of system interoperability. Such functionality undertakes the sequence of events, leading to maximized coordination between the FDC and other actors in the Battle Space.



Air Defense partner - **Raytheon**

WORLD CLASS
- through people, technology and dedication

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